



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,832	12/27/2000	Barry Wynn Albright	US000399	5207

24737 7590 01/25/2006

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER	
SHELEHEDA, JAMES R	
ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/749,832

Applicant(s)

ALBRIGHT, BARRY WYNN

Examiner

James Sheleheda

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-25 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-19 and 21-25 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/26/05 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 7-13, 22 and 24 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Grivna (6,385,745) (of record).

Regarding Claim 1, Grivna shows an apparatus comprising an inverted DVB-ASI signal (col. 2 lines 54-64, receiving both a true and compliment DVB-ASI stream), and

an inverting adapter to invert the inverted DVB-ASI signal to produce an adapted DVB-ASI signal (col. 3 lines 1-65, producing a complimented inverted signal), wherein an output DVB-ASI signal and the adapted DVB-ASI signal are available simultaneously (signals 82 and 84 simultaneously output to the multiplexer, 78; column 3, lines 28-31).

Regarding Claim 3, Grivna shows that the adapter inverts the DVB-ASI signal to produce the adapted signal (col. 3 lines 1-65, producing a complimented inverted signal), and the adapted signal is coupled to a monitor (col. 3 lines 30-45, output to state machine, col. 4 lines 38-45, state machine monitors data signal) and a network (col. 2 lines 60-63, col. 5 lines 35-40, outputting signal to SMPTE switches and routers).

Regarding Claim 7, Grivna shows a routing switcher (fig. 1, col. 2 lines 60-64, output port used to route DVB-ASI streams), the routing switcher coupled to an input DVB-ASI signal and producing the output DVB-ASI signal and the inverted DVB-ASI signal (col. 2 lines 54-64, receiving both a true and compliment DVB-ASI stream, col. 3 lines 1-65, producing a complimented inverted signal).

Regarding Claim 8, Grivna shows a serial digital video source (col. 1 lines 10-30, serial interface for producing digital serial video) that produces an encoded signal (col. 1 lines 20-25, MPEG2 encoding), wherein the SDV signal is coupled to the routing switcher (col. 2 lines 27-31, implemented using switches, lines 54-64, used to route DVB-ASI streams, col. 1 lines 30-61, routing switches used for digital video and DVB-

Art Unit: 2617

ASI signals), wherein the routing switcher produces an output signal and an inverted signal (fig. 3 items 66, 68, 70, 72, 90, 92, col. 3 lines 10-25, regular signal input from source and inverted signal from source). Furthermore, the DVB-ASI format is a serial digital video format.

Regarding Claim 9, Grivna shows the use of an encoder for encoding the signal (col. 1 lines 20-25, MPEG2 decoder).

Regarding Claim 10, Grivna shows a differential amplifier having an input coupled to the input DVB-ASI signal (fig. 3 items 74, 76, col. 3 lines 10-40) and having true and complement outputs (col. 2 lines 55-63, true and compliment output streams), wherein the true output is the output DVB-ASI signal and the complement output is the inverted DVB-ASI signal (col. 2 lines 55-63, true and compliment output streams).

Regarding Claim 11, Grivna shows that routing switches may be used in the adapter (col. 2 lines 27-32, implemented using switches) or that the entire adapter is used to route and switch DVB-ASI signals (col. 2 lines 55-63, route DVB-ASI, data streams). Also the adapter uses switches, as stated above, to route the correct signal (col. 3 lines 40-65, data may be switched between multiple sources).

Regarding Claim 12, Grivna shows a distribution amplifier (fig. 3 items 74, 76, col. 3 lines 10-40), the distribution amplifier coupled to an input DVB-ASI signal and

producing an output DVB-ASI signal and the inverted DVB-ASI signal (col. 2 lines 55-63, true and compliment output streams).

Regarding Claim 13, Grivna shows the distribution amplifier comprises the inverting adapter (fig. 3 item 56, logic circuit comprises components including amplifiers).

Regarding Claim 22, the limitations of the claim have been discussed with regards to Claim 1.

Regarding Claim 24, the limitations of the claim have been discussed with regards to the apparatus of Claim 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grivna and further in view of Takahashi et al (2002/0145661) (of record).

Regarding Claim 2, Grivna shows the user of a transform coupled to the signal (col. 4 lines 14-18), but fails to specifically state using primary and secondary windings.

Art Unit: 2617

Takahashi shows using primary and secondary windings in a transformer (page 8 section 0107, primary and secondary windings). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grivna with primary and secondary windings, as in Takahashi, so that the correct signal was applied to the circuit. Furthermore, although not specifically stated in Grivna, it is expected in the art for transformers to have primary and secondary windings

Regarding Claim 4, Although Grivna fails to specifically state the windings, which are shown by Takahashi, Grivna shows that the opposite sides have opposite polarity (col. 3 lines 54-65, INA+ and INB-, INA- and INB+) and that the adapter inverts the signal to produce the adapted signal (col. 3 lines 1-65, producing a complimented inverted signal).

Regarding Claim 23, the limitations of the claim have been discussed with regards to Claim 2.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grivna in further view of Takahashi, Foglia (4,885,747) (of record), and Wilkins et al (2004/0133924) (of record).

Regarding Claim 21, Grivna, Takahashi, and Foglia fail to show using a BNC, or British Naval Connector. Wilkins shows using a BNC in a video distribution system (page 4 section 0082). Therefore, it would have been obvious to one of ordinary skill in

the art at the time the invention was made to modify Grivna, Foglia, and Takahashi with the ability to use a BNC so that the system could connect to well known and widely used devices and protocols.

7. Claims 5, 6, 14-20, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grivna in further view of Takahashi and Foglia.

Regarding Claim 5, Grivna and Takahashi both fail to specifically state using the equal number of windings. Foglia shows using the same number of windings in a transformer (col. 6 lines 1-15, windings N1 and N2 are equal). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grivana and Takahashi with the use of equivalent primary and secondary windings, as shown in Foglia, so that the adapted signal would be suitable for processing and use.

Regarding Claim 6, Grivna shows that the adapter comprises a body (fig. 3, logic circuit 56) and input output connectors (col. 3 lines 10-39, input and outputs), wherein the adapter is enclosed in the body (fig. 3, logic circuit 56), and the body is electrically and mechanically coupled to the inputs and outputs (fig. 3, logic circuit 56 is connected and coupled to the outputs of col. 3 lines 10-39, fig. 3 items 66, 68, 70, 72, 90, 92).

Regarding Claim 14, Grivna shows a system comprising a Digital Video Broadcast-Asynchronous Serial Interface (DVB-ASI) encoder producing a DVB-ASI

Art Unit: 2617

output signal (col. 1 lines 20-25, MPEG2 encoded signal), amplification device comprising true and complement outputs (col. 2 lines 55-63, true and compliment output streams) and an input coupled the DVB-ASI signal (fig. 3 items 74, 76, col. 3 lines 10-40), the true output comprising the DVB-ASI signal and the complement output comprising an inverted DVB-ASI signal (col. 2 lines 53-63, compliment INA and INB input signals), and an inverting adapter comprising transformer, coupled to the inverted DVB-ASI signal (col. 4 lines 14-18), wherein a polarity of the secondary side is opposite to a polarity of the primary side (col. 3 lines 54-65, INA+ and INB-, INA- and INB+), whereby the inverting adapter inverts inverted DVB-ASI signal to create an adapted DVB-ASI signal (col. 3 lines 1-65, producing a complimented inverted signal), wherein the output DVB-ASI signal and the adapted DVB-ASI signal are available simultaneously (signals 82 and 84 simultaneously output to the multiplexer, 78; column 3, lines 28-31). Grivna shows the user of a transform coupled to the signal (col. 4 lines 14-18, but fails to specifically state using primary and secondary windings. Takahashi shows using primary and secondary windings in a transformer (page 8 section 0107, primary and secondary windings). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grivna with primary and secondary windings, as in Takahashi, so that the correct signal was applied to the circuit. Furthermore, although not specifically stated in Grivna, it is expected in the art for transformers to have primary and secondary windings.

Grivna and Takahashi both fail to specifically state using the equal number of windings. Foglia shows using the same number of windings in a transformer (col. 6

lines 1-15, windings N1 and N2 are equal). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grivana and Takahashi with the use of equivalent primary and secondary windings, as shown in Foglia, so that the adapted signal would be suitable for processing and use.

Regarding Claim 15, Grivna shows the use of a routing switcher (col. 2 lines 27-32, implemented using switches, col. 2 lines 55-63, route DVB-ASI, data streams, fig. 1, DVB switch) and amplifiers (fig. 3 items 74, 76, col. 3 lines 10-40).

Regarding Claim 16, Grivna shows the distribution amplifier comprises the inverting adapter (fig. 3 item 56, logic circuit comprises components including amplifiers).

Regarding Claim 17, Grivna shows that the adapter inverts the DVB-ASI signal to produce an adapted signal (col. 3 lines 1-65, producing a complimented inverted signal), and the adapted signal is coupled to a monitor (col. 3 lines 30-45, output to state machine, col. 4 lines 38-45, state machine monitors data signal) and a network (col. 2 lines 60-63, col. 5 lines 35-40, outputting signal to SMPTE switches and routers).

Regarding Claim 18, Grivna shows a serial digital video source (col. 1 lines 10-30, serial interface for producing digital serial video) that produces an encoded signal (col. 1 lines 20-25, MPEG2 encoding), wherein the SDV signal is coupled to the routing

Art Unit: 2617

switcher (col. 2 lines 27-31, implemented using switches, lines 54-64, used to route DVB-ASI streams, col. 1 lines 30-61, routing switches used for digital video and DVB-ASI signals), wherein the routing switcher produces an output signal and an inverted signal (fig. 3 items 66, 68, 70, 72, 90, 92, col. 3 lines 10-25, regular signal input from source and inverted signal from source). Furthermore, the DVB-ASI format is a serial digital video format. Grivna further shows the use of an encoder for encoding the signal (col. 1 lines 20-25, MPEG2 decoder).

Regarding Claim 19, Grivna shows an inverting adaptor for inverting inverted DVB-ASI signals (col. 3 lines 1-65, producing a complimented inverted signal), the inverting adapter comprising a transformer (col. 4 lines 14-18), wherein each side comprise positive and negative connections (col. 3 lines 54-65, INA+ and INB-, INA- and INB+), whereby polarity of secondary side is opposite polarity of the primary side (col. 3 lines 54-65, INA+ and INB-, INA- and INB+), input coupling adapted accept a DVB-ASI signal and comprising an input shell and an input interconnection device (fig. 3 items 66, 68, 70, 72, col. 3 lines 5-30, input connections), wherein the input shell is electrically and mechanically coupled to the body (fig. 3 item 56, col. 2 lines 65-67, logic circuit), and an output coupling comprising an output shell and an output interconnection device (Fig. 3, items 82, 84, col. 3, lines 30-65), wherein the output shell is electrically and mechanically coupled to the body (Fig. 3, items 82, 84, col. 3, lines 30-65, output on logical circuit), wherein the output interconnection device provides an adapted DVB-ASI signal (col. 3 lines 1-65, producing a complimented inverted signal), primary and

Art Unit: 2617

secondary outputs (82 and 84), wherein the primary output is electrically coupled to a DVB-ASI signal source (Fig. 3; column 3, lines 1-65), wherein the secondary output is electrically coupled to the adapted DVB-ASI signal (Fig. 3; column 3, lines 1-65), and wherein the output DVB-ASI signal and the adapted DVB-ASI signal are available simultaneously (signals 82 and 84 simultaneously output to the multiplexer, 78; column 3, lines 28-31). Grivna shows the user of a transform coupled to the signal (col. 4 lines 14-18), but fails to specifically state using primary and secondary windings or a body encasing the transformer. Takahashi shows using primary and secondary windings in a transformer (page 8 section 0107, primary and secondary windings) and a body that encases the transformer (fig. 12, items 14(1)-14(7)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grivna with primary and secondary windings, as in Takahashi, so that the correct signal was applied to the circuit. Furthermore, although not specifically stated in Grivna, it is expected in the art for transformers to have primary and secondary windings.

Also, Grivna fails to show that the second signal and housing are grounded. Takahashi shows grounding signals in order to get rid of noise and produce the correct output signal (page 7 sections 0089-0090, 0092-0093). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grivna with the ability to ground signals as shown in Takahashi so that the correct, undistorted, output signal would be produced.

Grivna and Takahashi both fail to specifically state using the equal number of windings. Foglia shows using the same number of windings in a transformer (col. 6

Art Unit: 2617

lines 1-15, windings N1 and N2 are equal). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grivana and Takahashi with the use of equivalent primary and secondary windings, as shown in Foglia, so that the adapted signal would be suitable for processing and use.

Regarding Claim 25, Grivna shows an inverting adaptor for DVB-ASI signals to create an adapted DVB-ASI signal (col. 3 lines 1-65, producing a complimented inverted signal), the inverting adapter comprising transformer (col. 4 lines 14-18), wherein each side comprise positive and negative connections (col. 3 lines 54-65, INA+ and INB-, INA- and INB+), whereby polarity of secondary side is opposite polarity of the primary side (col. 3 lines 54-65, INA+ and INB-, INA- and INB+), input coupling adapted accept a DVB-ASI signal and comprising an input shell and an input interconnection device (fig. 3 items 66, 68, 70, 72, col. 3 lines 5-30, input connections), wherein the input shell is electrically and mechanically coupled to the body (fig. 3 item 56, col. 2 lines 65-67, logic circuit), wherein the input pin is coupled to the positive connection of the primary side (col. 3 lines 54-65, INA+), and an output coupling comprising an output shell and an output interconnection device, wherein the output shell is electrically and mechanically coupled to the body (fig. 3 items 86, 90, 92, col. 3 lines 30-65, output on logical circuit). Grivna shows the user of a transform coupled to the signal (col. 4 lines 14-18), but fails to specifically state using primary and secondary windings or a body encasing the transformer. Takahashi shows using primary and secondary windings in a transformer (page 8 section 0107, primary and secondary windings) and a body that encases the

transformer (fig. 12, items 14(1)-14(7)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grivna with primary and secondary windings, as in Takahashi, so that the correct signal was applied to the circuit. Furthermore, although not specifically stated in Grivna, it is expected in the art for transformers to have primary and secondary windings.

Also, Grivna fails to show that the second signal and housing are grounded. Takahashi shows grounding signals in order to get rid of noise and produce the correct output signal (page 7 sections 0089-0090, 0092-0093). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grivna with the ability to ground signals as shown in Takahashi so that the correct, undistorted, output signal would be produced.

Grivna and Takahashi both fail to specifically state using the equal number of windings. Foglia shows using the same number of windings in a transformer (col. 6 lines 1-15, windings N1 and N2 are equal). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grivana and Takahashi with the use of equivalent primary and secondary windings, as shown in Foglia, so that the adapted signal would be suitable for processing and use.

Response to Arguments

8. Applicant's arguments filed 10/26/05 have been fully considered but they are not persuasive.

Art Unit: 2617

Applicant's argues that Grivna fails to disclose "wherein an output DBV-ASI signal and the adapted DVB-ASI signal are available simultaneously."

In response, Grivna specifically discloses wherein both the output DVB-ASI signal and the adapted DVB-ASI signal (Fig. 3; 82 and 84) are output and available simultaneously (to multiplexor, 78, for selection and processing; Fig. 3; column 3, lines 11-31). As the claim language is extremely broad and provides no limitations as to the particular output or availability of the signals, Grivna clearly meets the current broad claim limitations, as his signals are clearly "available" simultaneously.

Conclusion

9. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on _____.
(Date)

Typed or printed name of person signing this certificate:

Signature: _____

Registration Number: _____

Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. () _____ - _____ on _____.
(Date)

Typed or printed name of person signing this certificate:

Signature: _____ /

Registration Number: _____

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Sheleheda
Patent Examiner
Art Unit 2617

JS



VIVEK SRIVASTAVA
PRIMARY EXAMINER